

Appl. No. 10/014,310

49. (new) The plate of claim 47 further comprising an average grain size of about 25 microns.

CI 50. (new) The plate of claim 47 produced from a frictionless forged billet.

51. (new) The plate of claim 47 having a thickness, wherein the plate comprises the substantially uniform {100} crystallographic orientation throughout the thickness.

52. (new) The plate of claim 47 further comprising an average tantalum grain size of less than 50 microns at the plate surface.

53. (new) A tantalum plate comprising at least about 99.95 weight percent tantalum and a maximum grain size of less than 50 microns.

54. (new) The plate of claim 53 produced from a frictionless forged billet.

55. (new) A tantalum plate comprising an average grain size of about 25 microns.

56. (new) The plate of claim 55 comprising a maximum grain size of less than 50 microns.

57. (new) A tantalum plate comprising at least about 99.95 weight percent tantalum; the plate having a thickness and a maximum grain size of less than 50 microns throughout the thickness; the plate also comprising a substantially uniform {100} crystallographic orientation throughout the thickness.

58. (new) The plate of claim 57 comprising an average tantalum grain size of less than 50 microns throughout the thickness.

59. (new) A plate comprising at least about 99.95 weight percent tantalum and an average grain size of less than 50 microns.

60. (new) The plate of claim 59 produced from a frictionless forged billet.

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61. (new) A plate comprising at least about 99.95 weight percent tantalum and an average grain size of less than about 25 microns.
62. (new) Tantalum metal having a texture in which a {100} pole figure has a center peak intensity equal to or less than about 17 random.
63. (new) The tantalum metal of claim 62 comprising at least about 99.95 weight percent tantalum and having an average tantalum grain size of less than 50 microns at a surface of the metal.
64. (new) Tantalum metal having a texture in which a {100} pole figure has a center peak intensity equal to or less than about 7 random.
65. (new) The tantalum metal of claim 64 comprising at least about 99.95 weight percent tantalum and having an average tantalum grain size of less than 50 microns at a surface of the metal.
66. (new) Tantalum metal having a texture in which a {100} pole figure has a center peak intensity equal to or less than about 4.5 random.
67. (new) The tantalum metal of claim 66 comprising at least about 99.95 weight percent tantalum and having an average tantalum grain size of less than 50 microns at a surface of the metal.
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